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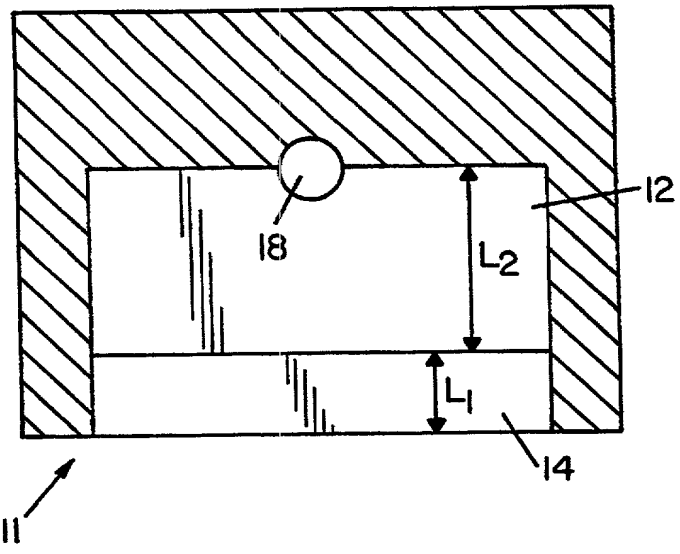
(54) Title: ORIENTATION OF SHORT FIBERS IN A CONTINUOUS PROCESS



(57) Abstract: A method and apparatus for continuously processing fiber into an elastomeric component uses an expanding die (11, 11a) for orienting fibers in other than the processing direction of the extrusion. In one embodiment, an injection mold (50) is used with the expanding die (11), and in another embodiment, an extruder (30) is used with expanding die (11a). Processing parameters may be alteredto control the direction of orientation of fibers (20) in the elastomer component. Orientation of fibers (20) in an extrudate (17) is dependent on the processing speed, viscosity of the elastomer, pressure of extrusion, the length l_1 and l_2 and height h_1 and h_2 of gate (12) and expansion cavity (14), respectively, of the expansion die (11, 11a).

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